Read This, But Don't Tell Anybody

Note: Members of the Ethics Committee suggested the following scenario, as it is not an uncommon story¹:

Jane is a very motivated and bright graduate student who is trying hard to purify a protein in a highly specialized area of research. Despite her perseverance, she meets with failure after failure. Finally, she goes to her PI, Dr. Smith, who is an internationally recognized investigator in Jane's area of research, and confesses her problem. The PI is silent for a while and then says, "Don't fret. I'll have something for you to look at tomorrow." The following day when Jane arrives at the lab, she sees an unpublished manuscript on her desk with a post-it note from Dr. Smith that says: "Jane, read the methods and results sections of this paper. I think they might contain the solution to your problems. But don't tell anybody I gave you this. As soon as you are finished, return the paper to me. And don't make any copies of it." The paper describes an experiment that seems exactly suited to solving Jane's problem. Sure enough and within a few days, Jane has purified the protein using the approach. She gleefully reports all this to her PI and returns the paper. She can't help asking though, "Dr. Smith, I have searched the literature high and low to find a method to help me with my project and found absolutely nothing. Where did you get that manuscript?" to which Dr. Smith obliquely replies, "Oh, I've got a ton of them."

Discuss the ethical dimensions of this scenario.

Expert Opinion

We purposefully omitted describing the origins of the paper Jane read because therein lies the moral content of this dilemma. The paper could have been written by Dr. Smith or a student in his lab and never published. Or it could have been a paper that Dr. Smith was reviewing for a peer-reviewed publication or for the NIH as a research grant application. Or it could have been a paper that had been reviewed for publication, was accepted, and was awaiting publication in the very near future. With an understanding of the federal Office of Research Integrity's characterization of plagiarism as "the theft or misappropriation of intellectual property and the substantial unattributed textual copying of another's work," ² let's consider each of these possibilities.

Scenario #1: The paper was written by a former student of Dr. Smith's who was working in Dr. Smith's lab at the time. The paper was never published nor was it ever submitted for publication.

Under these circumstances, there shouldn't be a problem with Jane's having access to and working from the paper's methods and results section. The reason is that Dr. Smith's university, which we shall call Exemplary U, probably owns the student's work as intellectual property. The only way the student could lay an unproblematic claim to owning the work is if he had already received the University's permission for him to copyright the material. If the student never sought copyright authorization or sought to publish the paper, Dr. Smith—as the university's representative and under whose direction and auspices the work was performed—would seemingly have sufficient authority to allow other investigators in his lab access to it.

As just implied, an interesting twist in this scenario would occur if the paper's original author, who let us suppose is now working at another university, would want to publish the paper's methods or propose their use in his own NIH application. This situation happens occasionally, as investigators will work together in a lab on a given project and subsequently go their separate ways. They might think that they can take their data and methods from their previous workplace without worry because, after

all, they created them. But their belief about their owning that intellectual property would be quite problematic without an antecedent contractual agreement with the university at which their work originally occurred.³

As the original methodology, which we shall call "the work," was created at Exemplary U, the university owns it and might wish to exert its property interest in that work. The student investigator will doubtlessly have signed an employment agreement with Exemplary U acknowledging the latter's ownership of his labor. So, if the student, who is now working at another university, would publish that paper as his own or if his current university would want to patent those methods (i.e., the ones that Jane used), Exemplary U would have grounds to sue (at least for breach of contract and perhaps copyright or patent infringement).

Consequently, this scenario doesn't appear to represent any moral turpitude on Dr. Smith's part. Nevertheless, when it comes time for Jane to write up her experiment for publication, she most certainly should acknowledge her predecessor's work in supplying the methodology she used. Indeed, if she decides she wants to cut and paste the wording that describes the methodology from the original paper, she is ethically obligated to contact the original author and invite him as an author on the paper. There is a sense in which the *wording* of the methodology section belongs to him, and Jane would be plagiarizing if she simply usurped that language and claimed it as her own. (This would not be essentially different from a situation where Jack and Jill are working in the same lab and Jill appropriates a paragraph word-for-word from a paper Jack is writing and pastes it in her own manuscript as her own work.)

So if Jane should wish to publish her work, she must first ask Dr. Smith for the name and contact information of the student author. Dr. Smith would then be ethically obligated to supply this information to Jane so that Jane can fulfill her ethical obligations. Indeed, given that Dr. Smith is the senior researcher in this scenario, he should from the outset reveal to Jane the origin of the work and inform Jane of her ethical obligations--and his willingness to supply the name and contact information--should she wish to publish.

Scenario #2: The paper is one that Dr. Smith was recently asked to review for a peer-reviewed publication or an NIH application. He hasn't turned in his review yet.

In this scenario, Dr. Smith has certainly committed moral turpitude by sharing the paper with Jane without permission. Journal reviewers and NIH reviewers pledge confidentiality, at least because the review process would be entirely unworkable if scientists couldn't trust reviewers to honor the identity of the work's originators or feared that reviewers might steal the paper's ideas and methods! ⁴ Smith's knowledge of this paper along with Jane's distress presents him with a conflict of loyalty. On the one hand, he is duty bound to respect his confidentiality agreement with the journal or the NIH. On the other hand, he feels a duty to help Jane with her research.

But by sharing the work with Jane, he not only violates that confidentiality agreement in principle, he shows very poor practical judgment in failing to consider how Jane (as well as himself perhaps) might eventually use the knowledge that obviously isn't theirs. The Office of Research Integrity asserts that "The theft or misappropriation of intellectual property includes the unauthorized use of ideas or unique methods obtained by a privileged communication, such as a grant or manuscript review." Thus, suppose Jane and Dr. Smith eventually submit a paper to a peer-reviewed journal or an application to the NIH that describes the methods they'll use but that does not acknowledge the source or the originator of those methods. Notice, once they *put forward* work to the scientific community—as in a paper submission or a grant—that derived from another's work but that they nevertheless and without authorization represent as theirs, they have committed plagiarism for which they can be sanctioned severely.

And, unfortunately, that does happen. Alan Price published a paper in 2006 that reviewed 19 plagiarism cases that came to the Federal Office of Research Integrity's attention. Price related one case involving a professor of pathology "who copied almost all of a grant application on human DNA telomerase enzyme ... which had been given to him in confidence by a peer reviewer. The respondent (i.e., the pathology professor accused of plagiarism) used it in his own NIH grant application." Another rather bizarre case involved a professor of chemistry who was accused by a former colleague of plagiarizing the latter's research design ideas from an NIH grant application into his own application. Upon being accused, the alleged plagiarizer claimed that he had given the application to a postdoctoral fellow as an academic exercise, and he had not realized that the fellow had actually plagiarized some of the words from the application, which the alleged plagiarizer then—unknowingly he claimed—incorporated into his own grant application. When asked to identify the post doctoral student, whose protection was promised by both ORI and the University, the alleged plagiarizer refused. Price related one

What would be comical if the situation wasn't so unfortunate (and sometimes career-ending) is how such plagiarists fail to appreciate how their plagiarized work might fall into the very hands of the person(s) from whom the work was plagiarized! But only a moment's consideration is needed to be impressed with that likelihood. Consider Jane's case. She is working on a highly specialized project to which only a handful of investigators around the world are devoting substantial effort. She finally finds the solution to her problem, which doubtless has been generated by just such a specialist. When she herself submits the work for review without an attribution to the originator of her methods, there is a high likelihood that that very specialist will be asked to review her work (or eventually come across it) and that he or she will instantly recognize it as their own. Indeed, of the 19 cases that Price reviewed in his paper, 8 of them dealt solely with plagiarism. (The other 11 dealt with plagiarism in combination with falsification or fabrication.) Price wrote that:

All but 1 of these 8 ORI cases of solely plagiarism involved the copying of words and/or ideas in NIH grant applications, detected by a reviewer, who was in most cases the original applicant whose own grant application to NIH (or to NSF), or the original author whose own publication, had been plagiarized; they just happened to become a reviewer for NIH or NSF of the questioned application and then reported the plagiarism to agency officials.^{1, p. 4}

So, a point in this scenario is that while it is a serious lapse of professional integrity to breach a confidentiality agreement and allow an unauthorized individual access to another's confidentially protected work, going the additional, morally unspeakable step of stealing that work and trying to pass it off as one's own might be easily discovered. Doing so combines theft with misrepresentation and can blemish one's career in a way from which he or she might never recover.

Scenario #3: The paper has been accepted for publication and will appear soon.

So, here, one might think that the moral thing for Dr. Smith to do would be to contact the author of the paper and ask for permission to share the paper with Jane and allow her to replicate the experiment. Once the author grants permission, then all things should proceed smoothly. If the author refuses, then Jane must wait until the paper appears in print.

In fact, though, Dr. Smith needs to contact the journal editors first and secure their permission for him to contact the author at least because 1) the journal owns the copyright to the material and might wish to control its dissemination before it appears in wide circulation, and 2) the journal might wish to keep Dr. Smith's identity, as a reviewer, unknown to the author (and so refuse Dr. Smith's request). ⁴

Generally, if the journal has no problem with a request like Dr. Smith's, an editor will contact the author and inquire if he or she would entertain a request like Smith's. The author might approve but with stipulations—such that the paper can be read and discussed by members of a particular lab but not disseminated to anyone else; or the author might stipulate that the paper can be read and discussed but

none of the novel research methods described in the paper can be tried by anyone until the paper is published. Or the author might deny the request altogether—perhaps because his institution wishes to patent some of the paper's intellectual work and the patent application process is taking longer than expected. Interestingly, an author might be able to publish a paper and then patent its ideas later, but doing so is tricky. Shamoo and Resnik note that:

If investors publish their ideas (or someone else does) prior to filing a patent, this may prevent them from obtaining a patent on their inventions in most countries. However, the U.S. patent laws have a one-year grace period from publication to patent. Thus, in the United States, investors can publish first and patent later. However, they may submit a provisional patent application with the U.S. Patent and Trade Office when they submit for publication, to protect their proprietary interest before filing a patent. ^{3, p. 126}

In conclusion, the temptation to use another scientist's work product might be considerable and, based on past history, certain persons will succumb to that temptation. The typical penalties handed down by the NIH for plagiarism include the plagiarist's having to certify through an institutional official that his or her future grant applications and reports cite all sources appropriately; and/or the ORI can prohibit plagiarists from serving on Public Health Service advisory committees, such as grant study sections for a period of time (e.g., 2 to 10 years); or the plagiarist can be barred from receiving grants for a specific period.¹

One cannot fail to be impressed by how today's investigators must not only be technically scrupulous in their labs, but morally scrupulous as well. By sharing the manuscript with Jane, Dr. Smith might be doing something morally unproblematic or he might be inviting disaster into his and Jane's careers. The devil is often in the details, but it will be the details or the circumstances of cases like these that inform their moral status.

References:

- 1. Price A. Cases of plagiarism handled by the United States Office of Research Integrity 1992-2005. *Plagiary: Cross Disciplineary Studies in Plagiarism, Fabrication, and Falsification,* 2006;1(1):1-11. Available at http://www.plagiary.org.
- 2. ORI. ORI's working definition of plagiarism. *ORI Newsletter*, 1994;3(1):3. Available at http://ori.dhhs.gov/policies/plagiarism.shtml.
- 3. Shamoo A, Resnik D. *Responsible Conduct of Research*. Oxford, UK: Oxford University Press, 2003: 119-138.
- 4. International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals: Writing and editing for biomedical publication. Updated October 2007. Available at http://www.icmje.org/. See Part II.E.2.

Some federal websites:

Federal Register: http://www.gpoaccess.gov/fr/

ORI Case Summaries: http://ori.hhs.gov.misconduct/cases/index.shtml

ORI Newsletter: http://ori.hhs.gov/publications/newsletters.shtml.

ORI Annual Report: http://ori.hhs.gov.publications/annual_reports.shtml.

Federal Excluded Persons List System: http://epls.arnet.gov/

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